

# Clyde Sea Sill

Marine Protected Area



A black guillemot with a fish © RSPB

An oceanic front

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## Marine Protected Area

Clyde Sea Sill Marine Protected Area (MPA) stretches from the Mull of Kintyre to Corsewall Point on the Rhins of Galloway. Below the surface in this region, the water shallows dramatically at a distinctive sill lying across the sea bed where the North Channel (between Scotland and Northern Ireland) becomes the Firth of Clyde. The sill causes the much cooler, saline waters of the North Channel to mix with the warmer, less saline waters of the Clyde, leading to the creation of a front.



Fronts can concentrate nutrients and plankton creating feeding hotspots for fish which in turn attract other higher marine predators. The sill is of recognised importance to local fish stocks with existing fisheries management measures in place here for spawning cod.



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Location: 55° 10.484' N 005° 26.203' W

Area: 712 km<sup>2</sup>



A sand star on coarse sand

## Protected Features & Conservation Objectives

**Biodiversity:** black guillemot; cirralittoral and offshore sand and coarse sediment communities; fronts.

**Geodiversity:** Marine Geomorphology of the Scottish Shelf Seabed.

The **aim is to conserve** these features in order to make a long lasting contribution to the MPA network.

The sea bed at the sill is a dynamic environment, heavily influenced by the twice daily rise and fall of the tide. A fairly distinct gradient in habitat type exists along the MPA, with coarse and mixed substrates in tide-swept conditions off Kintyre, rippled fine-medium sands in the centre of the sill, and sandy-mud habitats on the Galloway side. The sands and gravels on the sea floor are moved around, creating sandbank ridges or extensive sand ribbon and sand wave fields. Despite this highly mobile environment, there is a range of animals adapted to thrive here taking advantage of the productive waters. Clam shells and polychaete worms live beneath the sediment while fish, starfish, brittlestars, sea mice and hermit crabs roam the surface looking for food.

In the north-west of the MPA a colony of breeding black guillemots relies on the rich feeding grounds around Sanda, Sheep Island and Glunimore Island. The cliffs and rocky areas where these birds nest are protected by an existing Site of Special Scientific Interest (SSSI). Unlike other auks which feed offshore, the black guillemot is typically found feeding close inshore, rarely dispersing far from its breeding area even in winter.

# Further Information

Further information on Nature Conservation MPAs, the wider network and protected areas management is available at [www.scotland.gov.uk/Topics/marine/marine-environment/mpanetwork](http://www.scotland.gov.uk/Topics/marine/marine-environment/mpanetwork)

For Nature Conservation MPA site documents and more on the fascinating range of marine life to be found in Scotland's seas, please visit

[www.snh.gov.uk/mpas](http://www.snh.gov.uk/mpas) - for territorial waters

[www.jncc.defra.gov.uk/scottishmpas](http://www.jncc.defra.gov.uk/scottishmpas) - for offshore waters



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JNCC  
Joint Nature Conservation Committee

## Sanda Island lighthouse

